

## **AMENDMENTS TO THE CLAIMS:**

Please amend the claims as follows:

1. (Currently Amended) Method of analysis of the tumor aggressivity of cancerous cells consisting of the real time measurement of the quantity of polymerized actin in the steady state in a lysate of the said cells

wherein the real time measurement of the quantity of actin in the steady state is carried out by static fluorescence polarization in the presence of actin monomers bound to a fluorochrome, the monomers being incorporated into the actin filaments (actin F) formed during the endogenous actin polymerization of the lysate.

2. (Previously Presented) Method according to claim 1, wherein the measurement carried out on the lysate is compared to one or more reference values of the quantity of polymerized actin in the steady state.

3. (Previously Presented) Method according to claim 1, wherein the quantity of polymerized actin corresponds to the sum of all the F-form actin.

4. (Cancelled)

5. (Previously Presented) Method according to claim 1, wherein the actin monomers bound to a fluorochrome are added to the cellular lysate in a proportion ranging between  $1/80^{\text{th}}$  and  $1/1600^{\text{th}}$  in relation to the quantity of endogenous actin.

6. (Previously Presented) Method according to claim 1, including the steps of:

- lysing cancerous cells in non-denaturing conditions for the proteins, and the eliminating cellular debris,
- determining the total amount of proteins in the lysate,
- adding actin monomers bound to a fluorochrome,
- adding one or more substances to activate endogenous actin polymerization and protect the lysate proteins, wherein said substances are selected from the group consisting of subunits of the Arp2/3 complex and the Ena/VASP family of proteins, and
- measuring the quantity of polymerized actin in the steady state in the lysate.

7. (Previously Presented) Method of identification of molecules likely to present an anti-cancer activity, comprising implementing a method according to one of claims 1-3 and 5-6 in the presence of said molecule, and determining the capacity of said molecule to restore a quantity of polymerized actin in the steady state corresponding to that of non-aggressive cells is determined.

8. (Previously Presented) A method of evaluating cancer cells to determine their invasiveness, comprising carrying out the method according to one of claims 1-3 and 5-6.

9. (Previously Presented) A method of evaluating cancer cells to determine their oncogenicity, comprising carrying out the method according to one of claims 1-3 and 5-6.

10. (Previously Presented) A method of evaluating cancer cells to determine their sensitivity to an anti-cancer treatment, comprising carrying out the method according to one of claims 1-3 and 5-6.

11. (Previously Presented) The method according to claim 10, wherein the said anti-cancer treatment consists of radiotherapy or chemotherapy.

12. (Previously Presented) A kit for the implementation of a method according to one of claims 1-3 and 5-6, including:

- a cell re-suspension medium for the cell lysis,
- one or more substances to activate endogenous actin polymerization and protect the lysate proteins, wherein said substances are selected from the group consisting of subunits of the Arp2/3 complex and the Ena/VASP family of proteins,
- a solution of actin monomers bound to a fluorochrome,
- an actin polymerization solution, and
- a general actin solution.

13. (Previously Presented) The kit according to claim 12, wherein the kit further includes extracts of aggressive and non-aggressive reference cells.